

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:917

ANSWERED ON:03.03.2010

CONVERSION OF SEA WATER INTO POTABLE WATER

Munda Shri Arjun

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has formulated any scheme to convert sea water into potable water in the country;
- (b) if so, the details thereof alongwith its salient features;
- (c) whether any target has been fixed in this regard for the next two years; and
- (d) if so, the details thereof alongwith the locations identified in various States/UTs for this purpose?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) MINISTRY OF SCIENCE AND TECHNOLOGY, MINISTRY OF EARTH SCIENCES, MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI PRITHVIRAJ CHAVAN)

(a) Yes, Madam.

(b) The National Institute of Ocean Technology (NIOT), an autonomous body of the Ministry of Earth Sciences has indigenously designed developed and demonstrated the desalination technology for conversion of sea water into potable water based on Low Temperature Thermal Desalination System (LTTD). One LTTD plant with a capacity of 1 lakh liter per day production of fresh water was developed and installed in May 2005, at Kavaratti, Lakshadweep Island. The plant has been effectively working since then and catering significantly to the needs of the population of Kavaratti. The Lakshadweep Islands have the advantage of ocean depth (~500 m) available within few hundred meters from the coast and hence, such plants are possible. Another LTTD Plant of 1 lakh litre per day capacity was also established at Northern Chennai Thermal Power Station, Chennai in March 2009, which uses the waste heat discharge from the power plant. NIOT has also demonstrated an offshore barge mounted 10-lakh liter per day capacity plant about 40 kms off Chennai in April 2007, as a part of scaling up plants for the coastal region of India.

(c&d) Yes, Madam. NIOT is in the process of setting of 3 more plants in the Islands of Lakshawdeep as detailed below:

Location/Place	Schedule date of completion	Number of plants
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Agatti,	March, 2010	One
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Minicoy	December, 2010	One
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Andhroth	March, 2011	One
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Power Plants and Islands	Design completion by March, 2012	5 each
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A scheme is also being formulated for similar desalination plants in the coastal areas including at the coastal power plants with industry participation.